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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/787,160 | 02/27/2004 | Kang Soo Seo | 1740-000087/US | 4609 |
| 30593 7590 10/16/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195 | | | EXAMINER ATALA, JAMIE JO | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|-----------------------------------|--|
| Office Action Summary | Application No. 10/787,160 | Applicant(s) SEO ET AL. | |
| | Examiner JAMIE JO VENT ATALA | Art Unit 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 21-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 21-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection of Nonomura et al (US 5734788) in view of Kato et al (7,236,687).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claim invention is directed non-statutory subject matter. Claims 1-11 claim a "computer readable medium having a data structure.." wherein the data structure has no logical relationship between the elements. The claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized (MPEP 2106.01). Furthermore, making the "stream directory area, playlist directory area, management areas" to be nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture, or composition of matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15, 21-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura et al (US 5734788) in view of Kato et al (7,236,687).

[claim 1]

In regard to Claim 1 Nonomura et al discloses a computer readable medium having a data structure for managing random shuffle reproduction of video data recorded on the recording medium (Figures 7b and 0 show the random and shuffle reproduction of the playlist) the data structure including:

- A stream directory area storing at least one clip containing video data associated with the playlist (Figure 2a shows the volume area where the digital data is stored as seen on Column 6 Lines 15-24); however fails to disclose
 - A playlist directory area storing at lease one playlist indicating the clip, the playlist including a plurality of playitems, the playitems representing the playing interval of the clip, the playitem indicating a presentation start and end time based on time axis of the clip
 - Management area, separate from the playlist directory area, for storing at least one title management information file including at least one segment for launching the playlist the segment including a command indicating the playlist

- Wherein the playitem in the playlist is a unit to be randomized or shuffled during random/shuffle reproduction; and

Kato et al discloses a system for recording and storing information on a recording medium further comprising:

- A playlist directory area storing at least one playlist indicating the clip, the playlist including a plurality of playitems, the playitems representing the playing interval of the clip, the playitem indicating a presentation start and end time based on time axis of the clip (Figure 2 shows the playlist and playitem wherein the playitem associated with playlists are further shown in Figures 29-31. The use of playlist for storing information containing playitems that further contain information regarding the video data is further described in Column 20 Lines 39+);
- Management area, separate from the playlist directory area, for storing at least one title management information file including at least one segment for launching the playlist the segment including a command indicating the playlist (Figure 27 shows title management indicating the playlist information);
- Wherein the playitem in the playlist is a unit to be randomized or shuffled during random/shuffle reproduction (Column 8 Lines 23+ describes the playlist that can be random during reproduction); and

It is taught by Kato to provide playlist for storing information in the playitem to allow for information regarding the input of data to be constructed for processing, recording and retrieval of information (Column 7 Lines 38-67). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to use the system of reproducing data, as disclosed by Nonomura et al, and further incorporate the data area containing playlist and playitems regarding information of the video data, as taught by Kato et al, in order to provide effective processing, recording and retrieval of the data and further allow user to create a playlist of favorite clips. These features would enhance the user interface of the recording medium.

[claim 2]

In regard to Claim 2, Nonomura et al discloses a recording medium wherein a title managed by the title management information file is a logical unit of video data that is regarded as a reproduction unit by users (Figure 3b shows the title management information that stores the DVD data as video titles as described in Column 6 Lines 49-67).

[claim 3]

In regard to Claim 3, Nonomura et al discloses a recording medium wherein the title management file includes information on branch points information has segments, at which reproduction path is divided during reproduction (Column 9 Lines 43-68 describes the branch points and segments assigned to the reproduction paths as further described in Figure 7b).

[claim 4]

In regard to Claim 4, the claim limitations have been previously recited in Claim 3.

[claim 5]

In regard to Claim 5, Nonomura et al discloses a recording medium wherein the segments assigned to different reproduction paths are associated with a plurality of distinct playlist that are associated with distinct clips or disjoint intervals of one clip (Figure 8 shows the various clips wherein the VOB are the clips that are associated with the playlist as further described in Column 10 Lines 20-30 and thereby producing distinct/disjoint clips).

[claim 6]

In regard to Claim 6, the claim limitations have been previously recited in Claim 5.

[claim 7]

In regard to Claim 7, Nonomura et al discloses a recording medium wherein a plurality of play items and the storing of random/shuffle block in the title management information wherein reproduction can occur with either a standard reproduction mode or a random/shuffle reproduction mode (Figures 7b and 0 show the title management information and it is further described in Column 9 Lines 43-Column 11 Line 30 the various reproduction modes that can occur).

[claim 8]

In regard to Claim 8, the claim limitations have been previously discussed in Claim 7.

[claim 9]

In regard to Claim 9, the claim limitations have been previously discussed in Claim 7.

[claim 10]

In regard to Claim 10, the claim limitations have been previously discussed in Claim 7.

[claim 11]

In regard to Claim 11, the claim limitations have been previously recited in Claim 5.

[claim 12]

In regard to Claim 12, the claim limitations have been previously discussed in Claim 1.

[claim 13]

In regard to Claim 13, the claim limitations have been previously discussed in Claim 1.

[claim 14]

In regard to Claim 14, Nonomura et al discloses a method for reproducing a recording medium having a data structure for managing random/shuffle reproduction of video data, as discussed independent Claims 1, 12, 13, with the additional limitations:

- Drive for driving an optical recording means that records data on the recording medium (Figure 11 shows an optical disk drive 16 wherein an optical disk drive controlling unit 83 for controlling the drive and the data as further discussed in Column 12 Lines 58+ through Column 13 Lines 1-6).

[claim 15]

In regard to Claim 15, the claim limitations have been previously discussed in Claim 14.

[claim 21]

In regard to Claim 21, Nonomura et al discloses a title that is a logical unit of data managed by title management information file as a reproduction unit (Figure 6 shows title management information).

[claim 22]

In regard to Claim 22, Nomonura et al discloses a method for dividing information on branch points in the title management file during reproduction (Figure 6 shows the various branch points as well as figure 10).

[claim 23]

In regard to Claim 23, Nomonura et al discloses a method wherein random/shuffle reproduction of one playlist (Figure 7a and 7b).

[claim 24]

In regard to Claim 24, the claim limitations have been recited in Claim 23.

[claim 25]

In regard to Claim 25, Nomonura et al discloses a method associating playitem with clip of information from the clip information directory (Figure 2a shows the volume area where the digital data is stored as seen on Column 6 Lines 15-24).

[claim 26]

In regard to Claim 26, the claim limitations have been recited in Claim 21.

[claim 27]

In regard to Claim 27, the claim limitations have been recited in Claim 22.

[claim 28]

In regard to Claim 28, the claim limitations have been recited in Claim 23.

[claim 29]

In regard to Claim 29, the claim limitations have been recited in Claim 23.

[claim 30]

In regard to Claim 30, the claim limitations have been recited in Claim 25.

[claim 31]

In regard to Claim 31, the claim limitations have been recited in Claim 21.

[claim 32]

In regard to Claim 32, the claim limitations have been recited in Claim 22.

[claim 33]

In regard to Claim 33, the claim limitations have been recited in Claim 23.

[claim 34]

In regard to Claim 34, the claim limitations have been recited in Claim 21.

[claim 35]

In regard to Claim 27, the claim limitations have been recited in Claim 25.

[claim 36]

In regard to Claim 36, the claim limitations have been recited in Claim 21.

[claim 37]

In regard to Claim 37, the claim limitations have been recited in Claim 22.

[claim 38]

In regard to Claim 38, the claim limitations have been recited in Claim 23.

[claim 39]

In regard to Claim 39, the claim limitations have been recited in Claim 21.

[claim 40]

In regard to Claim 40, the claim limitations have been recited in Claim 25.

[claim 41]

In regard to Claim 41, Nomonura et al discloses a system wherein the sources packetizer is configured to packetize the data (Figure 11 shows the packetizing of data).

[claim 42]

In regard to Claim 42, Nomonura et al discloses a system wherein the sources depacketizer is configured to depacketize the data (Figure 11 shows the depacketizing of the data into the system).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/JAMIE JO VENT ATALA/

Examiner, Art Unit 2621

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621